BARNSTABLE COUNTY

CAPITAL IMPROVEMENT PROGRAM

FY2019-FY2023

Submission Date: January 17, 2018

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INTRODUCTION

The Capital Improvement Program (CIP) for the years FY2019-FY2023 is hereby submitted for approval of the County Commissioners and the Assembly of Delegates.

The Ordinance requesting approval and funding for the FY2019 capital projects is incorporated into this document and is accompanied by the detailed submission of the departments. Each submission was reviewed for project justification, timeliness, proposed funding source and affordability. It is not without merit that the total of approved projects is minimal as the County has, by the issuance of General Obligation Bonds in September 2017 and additional short-term financing, embarked on the road to address the historical capital deficit on the County's books.

In the short-term, the County will continue to formalize a comprehensive plan for future use and care and custody of all its assets and will incorporate this plan into its capital plan. As debt service falls off in the future years, new projects will be incorporated into the capital plan and the budget. Additionally, the County will strategize to fund future capital needs from revenue sources other than borrowing, reserving the option of borrowing to those projects identified for long-term financing limited to a term no greater than the useful life (in years) of the asset.

We have incorporated for the first time a debt service schedule for the County by fund and department and an update on the last three years of approved capital expenditures.

We appreciate the commitment of the County's leadership while we forge a new future for our capital needs, developing a sustainable plan for the County's assets and building the framework for capital planning to be a component part of all operational discussions. We also thank the departments for their willingness to incorporate the consideration of their capital needs into the broader picture and think outside the box.

CAPITAL IMPROVEMENT PROGRAM

FY2019-FY2023

BARNSTABLE COUNTY FISCAL YEAR 2019 BUDGET
(5-YEAR CAPITAL IMPROVEMENT PROGRAM)

PROJECT NAME	TOTAL PROJECT COSTS	PROPOSED FY19	PROPOSED FY20	PROPOSED FY21	PROPOSED FY22	PROPOSED FY23	FUNDING SOURCE
FACILITIES							
Sidewalks - County Complex	*$240,000*		$240,000				State Funds/Bond Proceeds
Window Replacement - Superior	$220,000			$220,000			State Funds/Bond Proceeds
HVAC Upgrade - Superior	*$420,000*				$420,000		State Funds/Bond Proceeds
HVAC Replacement - Second District	*$360,000*					$360,000	State Funds/Bond Proceeds
	$1,240,000	$0	$240,000	$220,000	$420,000	$360,000	
COOPERATIVE EXTENSION							
Vehicle Replacement	$30,000		$30,000				Vehicle Replacement Fund
Vehicle Replacement	$30,000				$30,000		Vehicle Replacement Fund
	$60,000	$0	$30,000	$0	$30,000	$0	
HEALTH & ENVIRONMENT							
Equipment Upgrades & Replacement	$668,000	$188,000	$150,000	$90,000	$90,000	$150,000	Departmental Revenues
	$668,000	$188,000	$150,000	$90,000	$90,000	$150,000	
FIRE TRAINING ACADEMY							
Building Construction	$200,000	$200,000					Bond Proceeds
	$200,000	$200,000	$0	$0	$0	$0	
GRAND TOTALS	$2,168,000	$388,000	$420,000	$310,000	$540,000	$510,000	

FY19 BUDGETED REQUESTS

Fiscal Year 2019 Capital Improvement Plan

Project Working Title: Purchase Fire Training system

Project Description: The Fire Training System is a 2-stack Live Fire and Confined Space Urban Search and Rescue (USAR) Training Facility designed in compliance with NFPA 1402, the Guide to Building Fire Service Training Centers and all applicable OSHA requirements. The system contains a Class "A" Fueled Burn Room with a temperature monitoring system and a standard reconfigurable confined space and (USAR) Maze System. The 2-stack system contains interior and exterior steel stairs configured with handrail systems, the exterior stairs further extending to the container rooftop.

Project Justification: The system will replace the decades old burn building with a modular system constructed using the latest industry standards for safety and environmental protection. Fire departments across the cape will train using a state of the system simulating real incidents that is designed to provide invaluable training in a controlled and safe environment.

Impact of Denial/Postponement: The burn building has stood alongside another concrete building at the Fire Training Academy for decades (built in the 60's and 80's, respectively) and these buildings have served at the site for Fire Training. These buildings are in dire need of replacement to ensure that the firefighters are provided the most technologically sound and safe environment in which to train. The Fire Training System modules are steel construction and are designed to be meet applicable environmental standards. The useful life by industry standards is 15-20 years.

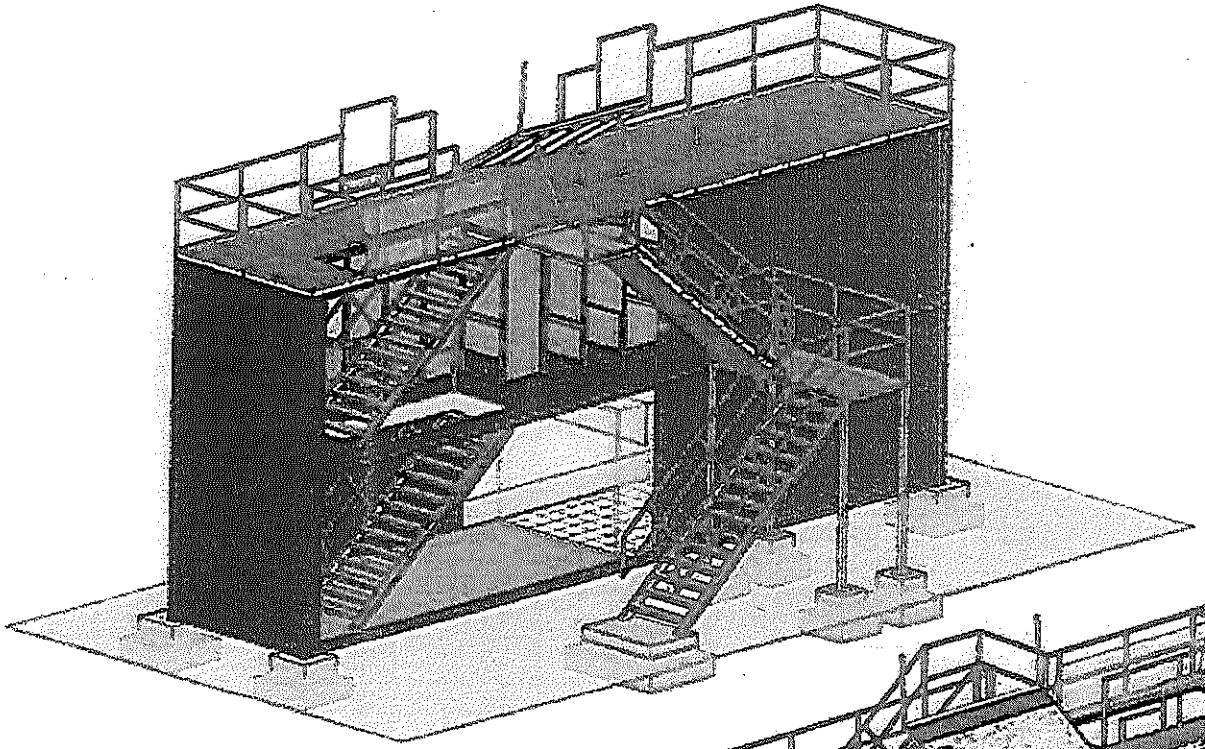
Projected Cost Estimate: $200,000

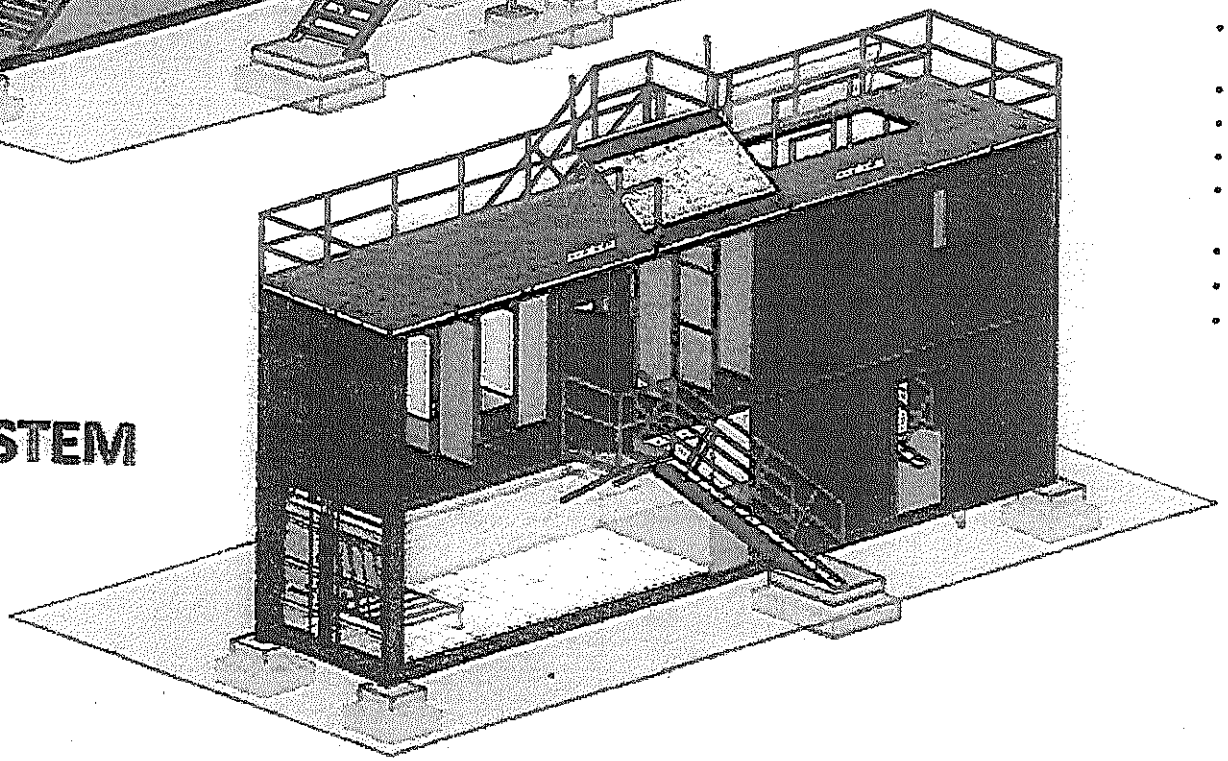
Basis for Cost Estimate: Manufacturer's quote for 2-Stack system and site preparation estimates

Projected Estimated Completion Date: August 2018

Project Cost/Description FY2019 & Follow-On Years: FY2019-Costs of purchase and installation of the system, including site preparation. FY19-FY2023: Operation and maintenance included in the Fire Training Academy's annual budget.

Operating Budget Impact-Immediate and Future Years: Debt Service over 10 years and routine operation and maintenance costs.





2 STACK SYSTEM

3233 E. Corona Avenue
Phoenix, AZ 85040
1-877-268-8303
www.mobilefireunits.com

- 2 – 40' CONTAINERS
- 1 – BURN ROOM
- TEMPERATURE MONITORING SYSTEM
- RECONFIGURABLE SCBA MAZE
- INTERIOR STAIRS
- EXTERIOR STAIRS
- ACTIVE ROOF
- OSHA COMPLIANT GUARDRAIL SYSTEM
- PITCHED ROOF PROP
- PERSONNEL DOORS
- WINDOW

Fiscal Year 2019 Capital Inprovement Plan

Project Working Title: Instrument Replacement for Laboratory

Project Description:
Replacement Of Inductively Coupled Plasma Spectrophotometer-Mass Spectrometer (ICPMS)

Project Justification:
Metals analyses comprise a major component of requests from the public, water departments and departments ofpublic works particularly in regard to drinking water and groundwater. The instrument to be replaced is an ICPMS that is 10 years old and an auto sampler. This instrument is under a mainteneance contract and has been utilized to analyze for metals such as Lead, Copper, Arsenic, Chromium, Barium and Mercury.

Impact of Denial/Postponement:
Our current ICPMS is 10 years old and nearing the end of its support life. We annually purchase a service contract for this unit at approximately $19,000.00. Should the instrument break down for an extended period of time, we would have to send samples to a contract laboratory and lose lab revenue. We would not need a service contract for the first three for the new instrument for its first three years. Our present instrument has slower analytical times as compared to the newer instruments and may hinder earning capability.

Projected Cost Estimate: Instrument + auto sampler cost $154,000.00

Basis for Cost Estimate: Quote from Manufacturer and In House installation

Project Estimated Completion Date: July 2018

Project Cost/Description FY2019 & Follow-On Years:

FY'19 $154,000.00 (Instrument Purchase)
FY'19 ---------FY'25 Only cost of consumables included in the supply budget

Operating Budget Impact - Immediate & Future Years:
Purchase will result in revenue of at least $80,000.00 per year but may grow higher with increased demand and special projects. FY'17 saw an increase of $70,000.00 for a lead and copper in schools project?

Fiscal Year 2019 Capital Inprovement Plan

Project Working Title: Equipment Purchase for Laboratory

Project Description:
Replacement of Acid Digestion Block with Self Contained Acid Digestion System

Project Justification:
With the development of the Massachusetts Alternative Septic System Test Center , the increased installation of alternative septic systems, and sampling for groundwater projects, the laboratory has seen and increase in the number of request for Total Kjeldahl Nitrogen analysis. A componant of this analysis is the digestion of the sample with sulfuric acid. Eventhough, this process takes place under a fume hood, it results in acid vapor being exausted through the ventilation system and air conditioning unit. This concentrated acidic vapor will reduce the operational life of the ventilation system and the air conditioner and eliminate safety hazards. The proposed system is a self contained and will nuetralize the concentrated acid vapor.

Impact of Denial/Postponement:
Our current digestion block is not self contained or able to neutralize the acid vapor and is not able to be retrofitted to perform these tasks as well. Continuing this process as it now stands may shorten the operational life of the the $500,000.00 air conditioner and ventilation system. Total Kjeldahl Nitrogen analysis brings in $70,000.00 of revenue annually. Revenue from this analysis will increase as more alternative septic systems are installed in the region.

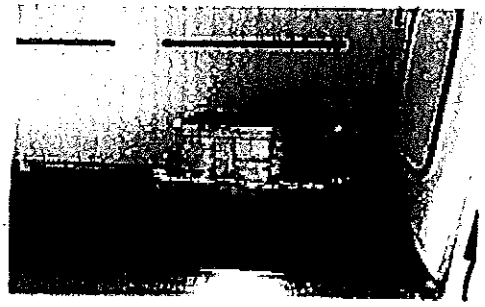
Projected Cost Estimate: Digester + Neutralizer cost $34,000.00

Basis for Cost Estimate: Quote from Manufacturer and In House installation

Project Estimated Completion Date: July 2018

Project Cost/Description FY2019 & Follow-On Years:
FY'19 $34,000.00 (Equipment Purchase)
FY'19 ---------FY'25 Only cost of consumables included in the supply budget

Operating Budget Impact - Immediate & Future Years:
Total Keldahn Nitrogen Analysis brings in $70,000.00 on an annual basis, delays in not containment process may result in repairs and replacement of air conditioner and ventilation components



Present Digestion Unit

STATUS OF PRIOR YEARS PROJECTS

FY2016-FY2018

BARNSTABLE COUNTY
UPDATE ON PRIOR YEARS PROJECTS
AS OF JANUARY 2018

FY2018 Ordinance #17-06

Department	Purpose	Authorized	Expended	Status
Facilities	Vehicle Replacement	35,000	29,422	Completed
	Roof Replacement - Superior Courthouse	360,000	0	Pendng State approval
	Exterior Renovations - Superior Courthouse	210,000	0	Pendng State approval
	Electrical Improvements - First District	45,000	0	In progress
	Total Authorized for FY2018	650,000	29,422	

FY2017 Ordinance #16-07

Department	Purpose	Authorized	Expended	Status
Health & Environment	Replace Ion Chromatograph	60,000.00	52,545.00	Completed
Information Technology	Software Licensing	325,000.00	219,553.00	To be completed in 2019
Facilities	Roof Replacement - 2ND District	170,000.00	-	Pending State approval
	Building Renovations - Old Jail	150,000.00	30,216.00	In process.
	Ancient Wall & Grounds Repair-Complex	75,000.00	-	Pending State approval
	Sound Wall Construction-Health Lab	70,000.00	-	Design & Engineering in progress
	Total Authorized for FY2017	850,000.00	302,314.00	

FY2016 Ordinance #15-05

Department	Purpose	Authorized		
Health & Environment	Replace Gas Chromatograph			
	Mass Spectrophotometer	89,000	88,895	Completed
	Replace small equipment	8,000	8,000	Completed
County Commissioners	Purchase ARC Conservation			
	Restriction	250,000	250,000	Completed
Information Technology	Software Licensing	325,000	325,000	Completed
Facilities	Window Replacement- 1ST District	60,000	0	Project suspended pending State approval
	Redesign - County complex	250,000	126,943	In Progress.
	Heating System - Superior	269,000	0	Project suspended pending State approval
	Windows - Registry of Deeds	150,000	7,150	Project suspended pending State approval
	Epoxy - Registry of Deeds	15,000	7,875	Completed
	Addition - Children's Cove	72,500	0	Project Cancelled
	Security Gate - Children's Cove	12,000	6,080	Competed
	Paving & drains - Complex	165,000	0	Project suspended
	HVAC Replacement - Fire Academy	30,000	14,121	In process
	New Roof - Fire Academy	60,000	0	Project held for facilities planning and design
	Total Authorized for FY2016	1,755,500	834,064	

COUNTY DEBT SERVICE

BY

FUND & DEPARTMENT

GENERAL FUND Purpose	Date of Issue	Maturity Date	Principal Amt.	Payments FY2018	Payments FY2019	Payments FY2020	Payments FY2021	Payments FY2022	Payments FY2023	Payments FY2024-FY2037
County Commissioners										
MCWT- Barnstable	1/15/2017	1/15/2037	2,950,000	201,062	184,655	184,469	184,280	184,087	183,890	2,551,397
Facilities										
House of Correction Renovation	9/20/2017	9/15/2032	150,000	2,734	15,375	14,875	14,375	13,875	13,375	112,763
County Complex Construction	9/20/2017	9/15/2027	250,000	5,469	35,625	34,375	33,125	31,875	30,625	135,500
Information Technology										
Software Licensing	9/20/2017	9/15/2022	325,000	7,899	79,625	76,375	73,125	69,875	66,625	
Software Licensing	9/20/2017	9/15/2022	75,000	1,823	18,375	17,625	16,875	16,125	15,375	
Software Licensing	9/20/2017	9/15/2022	100,000	2,431	24,500	23,500	22,500	21,500	20,500	
Software Licensing	9/20/2017	9/15/2022	140,000	3,403	36,250	34,750	33,250	26,875	25,625	
Major Software Systems	9/20/2017	9/15/2027	190,000	4,253	28,250	27,250	26,250	25,250	24,250	97,425
Telephone Systems	9/20/2017	9/15/2022	188,000	4,569	51,325	46,250	39,375	37,625	35,875	
Health & Environment										
Lab Equipment	9/20/2017	9/15/2023	60,000	1,458	12,750	12,250	11,750	11,250	10,750	10,250
Land Improvements	9/20/2017	9/15/2024	70,000	1,701	13,250	12,750	12,250	11,750	11,250	21,000
Lab Equipment	9/20/2017	9/15/2026	89,000	2,066	13,025	13,550	13,050	12,550	12,050	43,300
Cape Cod Commission										
Planimetrics	9/20/2017	9/15/2022	500,000	12,153	122,500	117,500	112,500	107,500	102,500	
Cooperative Extension										
ARC Conservation Restriction	9/20/2017	9/15/1932	250,000	4,709	29,188	28,187	27,188	26,187	25,188	169,144
Total General Fund			5,337,000	255,730	664,692	643,706	619,893	596,324	577,878	3,140,779

Dredge Enterprise Fund

Purpose	Date of Issue	Maturity Date	Principal Amt.	Payments FY2018	Payments FY2019	Payments FY2020	Payments FY2021	Payments FY2022	Payments FY2023	Payments FY2024-FY2037
New Dredge	9/20/2017	9/15/2032	2,000,000	36,641	207,000	200,250	193,500	186,750	180,000	1,493,012
Total Enterprise Fund			2,000,000	36,641	207,000	200,250	193,500	186,750	180,000	1,493,012

Septic Loan Fund

Purpose	Date of Issue	Maturity Date	Principal Amt.	Payments FY2018	Payments FY2019	Payments FY2020	Payments FY2021	Payments FY2022	Payments FY2023	Payments FY2024-FY2037
Septic Loan Fund										
MCWT										
Series 14: TS-05-1685	3/18/2009	7/15/2027	2,850,000	150,000	150,000	150,000	150,000	150,000	150,000	750,000
Series 15: TS-05-1685A	11/22/2010	7/15/2029	2,550,000	134,211	134,211	134,211	134,211	134,211	134,211	939,477
Series 15: TS-05-1685B	11/22/2010	7/15/2031	3,600,000	180,000	180,000	180,000	180,000	180,000	180,000	1,440,000
Series 15: 05-1685-C	7/8/2010	7/15/2030	3,000,000	150,000	150,000	150,000	150,000	150,000	150,000	1,200,000
Series 17B: 05-1685-D	5/22/2013	1/15/2033	4,000,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000
Series 17B: 05-1685-E	5/22/2013	1/15/2033	3,000,000	150,000	150,000	150,000	150,000	150,000	150,000	1,500,000
Series 17A: 05-1685-F	5/22/2013	1/5/2033	5,000,000	250,000	250,000	250,000	250,000	250,000	250,000	2,500,000
Series 18: TS-05-1685-G	1/7/2015	1/15/2035	5,000,000	250,000	250,000	250,000	250,000	250,000	250,000	2,500,000
Total Septic Loan Fund			29,000,000	1,464,211	1,464,211	1,464,211	1,464,211	1,464,211	1,464,211	12,829,477

FY19 REQUESTS

DEFERRED

~~DRAFT~~

Project Working Title:	Building Design and Construction of County Offices
Project Description:	Feasibility studies of two County owned properties for constructing needed office space - the County Farm on Route 6A in Cummaquid and the 5 acre parcel at Phinney's Lane and Route 132 in Hyannis. Design of a building at the preferred site resulting in construction of a new County facility.
Project Justification:	The Building Needs Assessment Committee Report submitted to the Barnstable County Commissioners unanimously recommended an evaluation be conducted of the structural status of existing county facilities to determine an efficient space plan for both County and Trial Court operations. The Division of Capital Asset Management and Maintenance delegated the responsibility of conducting this assessment to Barnstable County in August 2015. Various evaluations of county buildings have been conducted under the supervision of the Facilities Department Based on this information and the space needs of the County, the Commissioners wish to pursue a site assessment for construction at two County owned parcels and ultimately, the design of a facility at one of these locations. Additionally, the Cape Cod Commission leases private office space under a lease agreement that is expiring in November 2018.
Impact of Denial/Postponement:	Continued inefficient utilization of available space for County and Trial Court operations; Unrealized building lease revenue from Trial Court; Continued use of Commission funds for leased space instead of building equity in a capital asset.
Projected Cost Estimate:	Phase I Design - $400,000 - $675,000 Phase II Construction - $4 - $6.75 million
Basis for Cost Estimate:	$200-$225/sf construction cost for a 20k-30k sf building; 10% of construction budget for design
Project Estimated Completion Date:	Phase I Design complete by March 2019; Phase II Construction timeline to be developed.
Project Cost/Description FY2019 & Follow-On Years:	FY19 cost for design only - recommend short term bond anticipation note FY20 - contingent upon construction schedule; ultimately bond entire project Source - CCEPF for CCC portion; General Fund for County portion

Operating Budget Impact - Immediate & Future Years:

The Commission's current lease agreement will end in November 2018. With one additional renewal option remaining, the annual cost for the next 5 year term is $189,765, an amount that could be used to offset the bond repayment.